B. IN THE SPECIFICATION:

Instruction 1: Please replace the paragraphs on page 25, lines 6-17 with the following paragraphs:

a2

A notched face in FIG. 9A represents a deep, U-shaped indentation 20a along the radial center of the pole face 10, extending from the top 30 of the pole to the bottom 40 of the pole. The top of the pole and the bottom of the pole are differentiated from the leading edges 50 of the pole. The leading edges are the portions of the pole that first come into relation with an opposing pole when the motor is in operation.

In like manner, a notched face in FIG. 9B represents a wide, chamfered indentation 20b in the pole face 10, also centrally located in the pole and extending from the top to the bottom of the pole. Also, a notched face in FIG. 9C represents a shallow indentation 20c in the pole face 10, while a notched face in FIG. 9D represents a raised indentation 20d in the pole face 10. Finally, a notched pole in FIG. 9E represents an offset notch 20e not located on the radial center 30 of the pole 10. For contrast to the notched faces in FIGS. 9A-E, a uniform face 10f is presented in FIG. 9F to illustrate the typically uniform face of a switched reluctance motor pole.

Instruction 2: Please replace the paragraph beginning at page 25, line 25 and ending at page 26, line 2 with the following paragraph:

a3

One such alternative embodiment involves the use of closed or "semi-closed" rotor poles that include areas near the pole face of the rotor pole to be modified that have magnetic material removed so as to leave an air gap or a portion of the rotor that includes material that will not conduct magnetic flux. An example of a rotor pole having a closed configuration is provided in FIG. 9G, where a portion of the rotor pole material has been removed to define a bore 20g passing through the rotor pole face 10. The use of a closed rotor pole allows for control of the radial forces established as the closed rotor pole moves towards and into alignment with the stator poles, but does not have the same tendency to produce windage noise as a notched rotor pole.

Instruction 3: Please replace the paragraphs on page 26, lines 8-27 with the following paragraphs:

a4

A still further alternate embodiment involves the utilization of a rotor wherein the length of the rotor poles is different at various points so as to present differing air gaps to the stator poles associated with an energized phase winding. One exemplary rotor pole having such a construction is shown in FIG. 9H. The pole face 10 is provided with a step so that the length of the rotor poles is different at portion 20h. As a result, differing air gaps are presented to the stator poles associated with an energized phase winding as the rotor poles pass in relation.

FIG. 9I shows two embodiments of notches that pass through the laminations that construct the pole without altering the actual face of the pole. An axial bore 20i passes from the top of the pole 30, through the myriad of laminations that make the pole, and to the bottom of the pole 40. The axial bore may have a variety of shapes in order to affect the normal force profile associated with the pole. Bore 20i is a cylindrical bore, while bore 21 also in FIG. 9I is a half-cylindrical bore.

FIG. 9J shows a notch in the pole face 10 having a narrow opening 20j in the pole face. The notch also has a wider bore section 22 that passes through the laminations of the pole from the top 30 to the bottom 40 of the pole.

FIG. 9K shows another embodiment of a notch 20k in a pole face 10 according to the present invention. The notch runs along the width of the pole face from a leading edge 50 to a trailing edge 50’, instead of those described above that pass from the top 30 to the bottom 40 of the pole.

Instruction 4: Please replace the paragraph on page 35, lines 18-24 with the following paragraph:

a5

FIG. 20 shows an additional embodiment of a 3-phase, 6/4-reluctance machine. The machine has three radially opposed stator poles A, B, and C, each having a phase. The rotor has two radially opposed pairs of rotor poles 1-1' and 2-2'. Three tables are presented below to illustrate various configurations that can be made with the present embodiment and others discussed herein. The present embodiment and Tables illustrate the interrelation of rotor pole to stator pole ratio and number of phases in regards to the distribution of deflections around the stator with time or location.

Instruction 5: Please remove Table 1, Table 2, and Table 3 from page 54 of the specification and insert the same in the paragraphs beginning at page 35, line 25 and ending at page 36, line 28 as follows:

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a6

First, by making the radially opposed rotor pole pair <u>1</u> to have a modification such as a notch, Table 1 illustrates how deflections of the stator change at a given time, but the location of the deflections change over time around the stator. The notched pair of poles 1 is shown in bold and underlined. With the energization of Phase A, the notched poles <u>1</u> are brought into relation to the stator pair A of phase A. This corresponds to a first deflection configuration (I) since the normal force profile results from the interaction of notched rotor poles with uniform stator poles.

Table 1

Phase Energization	A	B	C	A	B	C
Rotor Pole pair	<u>1</u>	2	<u>1</u>	2	<u>1</u>	2
Deflection Configuration	I	II	I	II	I	II

Continuing with the Table 1, as phase B is energized, the rotor pair 2 is brought into relation to the stator pair B of Phase B. This interaction corresponds to a second deflection configuration (II) since the normal force profile involved is the result of uniform stator and rotor poles. As Phase C is energized, the rotor pair <u>1</u> is brought into relation to the stator pair C of Phase C. This interaction corresponds to the first deflection configuration (I) since the normal force profile involves uniform stator and notched rotor poles. As the table further shows, the two deflection configurations (I, II) alter at given times during the series of energizations. Also, the deflections move around the stator over time with the series of energizations.

Referring to Table 2, the stator pole pair <u>A</u> of the present embodiment is notched or modified according to the present invention. The rotor pole pairs and the other stator pole pairs are provided with uniform faces. Under this arrangement, deflections of the stator change at a given time in the series of energizations. However, the location of deflections remains the same on the stator.

a6 cont'd.

Table 2

Phase Energization	A	B	C	A	B	C
Rotor Pole pair	**1**	**2**	**1**	**2**	**1**	**2**
Deflection Configuration	I	II	II	I	II	II

In Table 2, the energized stator pole pair A with notched or modified poles produces a first deflection configuration (I) as the rotor poles pass in relation. In contrast, the stator pole pairs of B and C uniform faced poles produce a second deflection configuration (II) as the rotor poles pass in relation. As shown in the table, the first configuration (I) occurs at a given time in the energizations and only at the stator pole pair A.

Thirdly, this and other embodiments can be modified such that the deflection of the stator changes over time, and the location of deflections can be made to change around the stator. Table 3 shows an arrangement for the present embodiment where the stator pole pair A is modified, and the rotor pole pair 1 is also modified to produce differing normal force profiles according to the present invention.

Table 3

Phase Energization	A	B	C	A	B	C
Rotor Pole pair	**1**	**2**	**1**	**2**	**1**	**2**
Deflection Configuration	I	II	III	IV	III	II

As a result, a more complex set of deflections makes four different configurations (I, II, III, IV). The distribution of deflections changes over time, and the location of the deflections also move around the stator over time with each phase energization.